This public summary represents information presented in draft Volume II of the Historical Radiological Assessment (HRA). Neither the document nor the public summary has been reviewed by the regulatory agencies.

Public Summary: Draft Historical Radiological Assessment, Volume II

Use of General Radioactive Materials (G-RAM), 1939 - 2002

**Hunters Point Shipyard (HPS)** 

March 29, 2002

This document summarizes the draft HRA for G-RAM at HPS that is published as Volume II of the draft HRA. Volume I of the draft HRA was published in August 2000 and addresses the impact of the berthing and maintenance of nuclear-powered ships at HPS. Volume II has been prepared by the U.S. Department of the Navy (Navy) following the guidelines of the "Multi-Agency Radiation Survey and Site Investigation Manual" (MARSSIM), a consensus document of the U.S. Environmental Protection Agency, U.S. Nuclear Regulatory Commission, Department of Energy, and Department of Defense that is also used by the State of California Department of Health Services. MARSSIM guidance provides a process for assessing the impact of the historical use of radioactive materials. Initial steps in this process include the preparation of the draft HRA and classification of buildings and areas as non-impacted (areas having no reasonable possibility of residual G-RAM) or impacted (areas potentially containing residual G-RAM that exceed natural background or fallout levels).

The Navy prepared the draft HRA to document the historical uses of G-RAM at HPS and assess the impact of G-RAM use on the current environmental status of impacted areas and buildings at HPS. The draft HRA approach consisted of reviewing historical records on the use, handling, and disposal of G-RAM from the beginning of Navy's activities at HPS in 1940 to the present; interviewing personnel involved with those operations; and conducting field investigations to verify the results of previous surveys. The draft HRA records review and personnel interviews, field investigations of impacted areas, and information repositories are summarized below.

Records Review and Personnel Interviews: The Navy's review of records and interviews with past HPS employees indicates that after its establishment as a shipbuilding and repair center during World War II, pure and applied radiological research also played a major role in HPS's activities. Use of G-RAM at HPS fell into four categories: (1) Naval shipyard operations, (2) Naval Radiological Defense Laboratory (NRDL) research operations, (3) decontamination of ships associated with atomic testing operations, and (4) civilian shipyard operations. HPS was officially closed under the 1991 round of Defense Base Closures and Realignments. Today, many HPS buildings have been leased to private tenants and Navy-related entities for maritime and non-maritime industrial and artistic purposes. Land in the vicinity of HPS is used for residential, industrial, and commercial purposes.

Use of G-RAM for shipyard and NRDL operations at HPS was regulated by the Atomic Energy Commission (AEC), a civilian agency of the United States government, established by the Atomic Energy Act of 1946 to administer and regulate the production and use of atomic power. AEC required the shipyard and NRDL to conform to a rigorous process in order to obtain and maintain its AEC licenses for G-RAM-related purposes. The Navy's own internal directives and safety requirements supplemented the AEC oversight. Methods for decontamination of the ships associated with atomic testing were developed and tested at HPS who set the standards for these processes for the Navy. While there is no record that Triple A Machine Shop used licensed radioactive material, they did employ contractors who held State of California Agreement State licenses.

HPS and NRDL used many different radioisotopes and machines that produce ionizing radiation. However, as a licensee, they were both subject to AEC and Navy inspections. When shipyard and NRDL operations ceased and licenses were terminated, all licensed radioactive material was either transferred to another licensed activities or disposed of at a licensed disposal facility, and the areas of use were properly surveyed and decontaminated to the applicable standards of the time.

**Field Investigations of Impacted Areas:** Beginning in 1946, numerous radiological investigations and removal actions have been conducted at HPS, including four investigations (Phases I through IV) under the Comprehensive Environmental Response, Compensation, and Liability Act program. A current Phase V investigation is ongoing throughout Parcels B through E at impacted areas and buildings to either confirm the absence of G-RAM or recommend further investigation and remediation. Appendix E of the draft HRA, Volume II, summarizes the results of the Phase V investigation for Parcels B and D.

Information Repositories: A complete copy of the draft Volume II HRA, dated March 29, 2002, is available on the Internet at the following website address: HuntersPoint-HRA.waterware.com. On the website, three documents are provided: this public summary, the draft HRA, and Appendix B, Documents Reviewed. Appendix B is the documents reviewed to prepare the draft HRA. This appendix is approximately 550 megabytes. Downloading the entire appendix using a 56-k modem will take about 22 hours. The public summary, the draft HRA, Volume II, and Appendix B will be published on CDs, and may be obtained from Mr. Lee Saunders of the Navy at (619) 532-3100 or SaundersLH@efdsw.navfac.navy.mil. The draft HRA report, including CDs, will also be available at the following two public libraries:

San Francisco Main Library 100 Larkin Street Government Information Center, 5<sup>th</sup> Floor San Francisco, CA 94102 Telephone: (415) 557-4500 Anna E. Waden Library 5075 Third Street San Francisco, CA 94124 Telephone: (415) 715-4100

For more information about environmental investigation and cleanup at HPS, contact the Base Realignment and Closure (BRAC) Environmental Coordinator (BEC) Mr. Keith S. Forman of the Navy at (619) 532-0912 (telephone), (415) 515-6216 (telephone), and (619) 532-0995 (fax), or formanks@efdsw.navfac.navy.mil (e-mail).